GenCore version 4.5

OM protein - protein search, using sw model

Run on: August 28, 2002, 17:31:06 ; Search time 75.04 Seconds
(without alignments)
368.568 Million cell updates/sec

Title: US-09-502-984B-37
Perfect score: 1284
Sequence: 1 KFESKAALLAARGPEELLCF.....RKNERLEEEVERLKQLVGER 249

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_032802:*
1: /SIDS1/gcgdata/hold-geneseq/geneseqp-embl/AA1980.DAT:*
2: /SIDS1/gcgdata/hold-geneseq/geneseqp-embl/AA1981.DAT:*
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22: /SIDS1/gcgdata/hold-geneseq/geneseqp-embl/AA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1060	82.6	211	21	AAB21686	Human mature eryth
2	1060	82.6	225	21	AAB21685	Human mature eryth
3	1060	82.6	438	21	AAY44622	Truncated human Ep
4	1060	82.6	488	18	AAW08349	EpoRFc fusion prot
5	1060	82.6	503	21	AAB13012	Q-tagged erythropo
6	1060	82.6	508	11	AAR06512	EPO receptor. Hom
7	1060	82.6	508	16	AAR70032	Human erythropoiet
8	1060	82.6	508	16	AAR69503	Human erythropoiet
9	1053	82.0	508	15	AAR47518	Human EPO receptor
10	1052	81.9	438	21	AAY44623	R154C truncated hu
11	875.5	68.2	265	15	AAR50326	Mouse soluble EPO
12	869.5	67.7	507	11	AAR06511	EPO receptor seque
13	869.5	67.7	507	15	AAR47517	MEL EPO receptor.
14	869.5	67.7	507	16	AAR69502	Mouse erythropoiet
15	862.5	67.2	507	15	AAR50327	Mouse soluble EPO
16	171	13.3	625	22	AAU00377	Mouse thrombopoiet
17	167.5	13.0	117	21	AAY94338	Human cell surface
18	167	13.0	482	16	AAR75941	Soluble murine MPL
19	166	12.9	633	16	AAR79908	Type I MPL recepto
20	166	12.9	633	16	AAR79053	Mouse type I MPL r
21	166	12.9	633	17	AAR98948	Mouse type I MPL r
22	166	12.9	633	17	AAW03513	Mouse type I MPL r
23	166	12.9	633	21	AAY52166	Mouse MPL type I r
24	164	12.8	626	16	AAR75939	Murine myeloprolif
25	160	12.5	30	17	AAR89963	Synthetic human er
26	158	12.3	33	21	AAB21682	Colied coil motif
27	150	11.7	30	17	AAR89964	Synthetic human er
28	146	11.4	635	13	AAR23970	MPLV env protein w
29	146	11.4	635	16	AAR75940	Human myeloprolife
30	146	11.4	635	22	AAU00376	Human thrombopoiet
31	145	11.3	30	17	AAR98936	Synthetic human er
32	143	11.1	30	17	AAR89965	Synthetic human er
33	142	11.1	30	17	AAR98937	Synthetic human er
34	142	11.1	322	22	AAB20440	Antibody 8860 biva
35	138	10.7	325	22	AAB20438	Anti-FIX/FIXa anti
36	134.5	10.5	389	20	AAW70846	Human Zcytor5 vari
37	134	10.4	30	17	AAR98938	Synthetic human er
38	133.5	10.4	350	19	AAW55015	Amino acid sequenc
39	133.5	10.4	350	22	AAE00824	Human NR6 haemopoi
40	133.5	10.4	389	20	AAW70848	Human Zcytor5 vari
41	133.5	10.4	389	20	AAW70849	Human Zcytor5 vari
42	133.5	10.4	389	20	AAW70844	Human Zcytor5 vari
43	133.5	10.4	392	20	AAW70840	Human Zcytor5 vari
44	133.5	10.4	408	19	AAW59805	Amino acid sequenc
45	133.5	10.4	408	20	AAY26338	Human U4 haematopo

ALIGNMENTS

RESULT 1
AAB21686
ID AAB21686 standard; peptide; 211 AA.
XX
AC AAB21686;
XX
DT 21-DEC-2000 (first entry)
XX
DE Human mature erythropoietin receptor EPOR extracellular domain #2.
XX
KW Ligand; cell surface receptor; erythropoietin; EPOR; human;
KW protein design automation; PDA.
XX
OS Homo sapiens.
XX
PN WO200047612-A2.
XX
PD 17-AUG-2000.
XX
PF 11-FEB-2000; 2000WO-US03665.
XX
PR 11-FEB-1999; 99US-0120009.
PR 29-APR-1999; 99US-0131674.
XX
PA (XENC-) XENCOR INC.
XX
PI Luo P, Dahiyat B;
XX
DR WPI; 2000-549135/50.
XX
PT Screening for ligand analogs and agents which modulate ligand-receptor
PT binding, comprises adding a test ligand to a non-naturally occurring
PT cell surface receptor analog -
XX

PS Example 1; Fig 8; 82pp; English.
XX
CC The present invention relates to a method for screening for a ligand
CC analog, comprising adding a candidate ligand to a non-naturally occurring
CC cell surface receptor analog e.g. erythropoietin receptor (EPOR), and
CC determining the binding of the ligand to the analog. The present sequence
CC is a mature human erythropoietin receptor (EPOR) extracellular domain.
CC Protein Design Automation was carried out on the present sequence, so
CC that it may be used in the present invention as a cell surface receptor
CC analog.
XX
SQ Sequence 211 AA;

Query Match 82.6%; Score 1060; DB 21; Length 211;
Best Local Similarity 93.8%; Pred. No. 8.1e-99;
Matches 198; Conservative 11; Mismatches 2; Indels 0; Gaps 0;

Qy 1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
Db 1 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 60

Qy 61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
Db 61 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 120

Qy 121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
Db 121 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 180

Qy 181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
Db 181 trytfavrarmaepsfggfwsawsepvsllt 211

RESULT 2
AAB21685
ID AAB21685 standard; peptide; 225 AA.
XX
AC AAB21685;
XX
DT 21-DEC-2000 (first entry)
XX
DE Human mature erythropoietin receptor EPOR extracellular domain #1.
XX
KW Ligand; cell surface receptor; erythropoietin; EPOR; human.
XX
OS Homo sapiens.
XX
PN WO200047612-A2.
XX
PD 17-AUG-2000.
XX
PF 11-FEB-2000; 2000WO-US03665.
XX
PR 11-FEB-1999; 99US-0120009.
PR 29-APR-1999; 99US-0131674.
XX
PA (XENC-) XENCOR INC.
XX
PI Luo P, Dahiyat B;
XX
DR WPI; 2000-549135/50.
XX
PT Screening for ligand analogs and agents which modulate ligand-receptor
PT binding, comprises adding a test ligand to a non-naturally occurring
PT cell surface receptor analog -
XX
PS Example 1; Fig 8; 82pp; English.
XX
CC The present invention relates to a method for screening for a ligand
CC analog, comprising adding a candidate ligand to a non-naturally occurring
CC cell surface receptor analog e.g. erythropoietin receptor (EPOR), and
CC determining the binding of the ligand to the analog. The present sequence
CC is a mature human erythropoietin receptor (EPOR) extracellular domain.
CC This sequence may be used in the present invention as a cell surface
CC receptor analog.
XX
SQ Sequence 225 AA;

Query Match 82.6%; Score 1060; DB 21; Length 225;
Best Local Similarity 93.8%; Pred. No. 8.8e-99;
Matches 198; Conservative 11; Mismatches 2; Indels 0; Gaps 0;

Qy 1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
Db 10 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 69

Qy 61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
Db 70 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 129

Qy 121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
Db 130 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 189

Qy 181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
Db 190 trytfavrarmaepsfggfwsawsepvsllt 220

RESULT 3
AAY44622
ID AAY44622 standard; Protein; 438 AA.
XX
AC AAY44622;
XX
DT 07-APR-2000 (first entry)
XX
DE Truncated human EpoR(t439).
XX
KW Truncated human EpoR; erythropoietin receptor; hypersensitive EpoR(t439);
KW mutant human EpoR; EpoR signalling; cancer; infectious disease; HIV;
KW sickle cell anaemia; cytostatic; antimicrobial; antiviral;
KW immunostimulant; anti-anaemic.
XX
OS Homo sapiens.
XX
PN WO9967360-A2.
XX
PD 29-DEC-1999.
XX
PF 25-JUN-1999; 99WO-CA00606.
XX
PR 25-JUN-1998; 98CA-2241576.
PR 25-JAN-1999; 99CA-2260332.
XX
PA (HEMO-) HEMOSOL INC.
XX
PI Bell D, Matthews KE, Mueller SG;
XX
DR WPI; 2000-136979/12.
DR P-PSDB; AAZ49634.
XX
PT Serum free defined medium useful for the efficient culture of stem
PT cells used for production of hemoglobin -
XX
PS Example 6; Fig 9; 61pp; English.
XX
CC The present sequence is truncated human EpoR (erythropoietin receptor).
CC Transfection of constitutively active EpoR(t439) by electroporation into
CC a cytokine-dependent cell line supports cell population expansion in the
CC absence of exogenous cytokines. Mutant human EpoR is used in treatment of
CC disorders related to inadequate EpoR signalling. The transfected cells
CC may also used in gene therapy to treat cancer, infectious diseases

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CC   (e.g. HIV), sickle cell anaemia, and conditions related to abnormal
CC   expression of erythropoietin.
XX
SQ   Sequence   438 AA;


  Query Match             82.6%;  Score 1060;  DB 21;  Length 438;
  Best Local Similarity   93.8%;  Pred. No. 2.1e-98;
  Matches  198;  Conservative   11;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           ||||||||||||||||||||||||||||||:||||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:|||||||||||||||||||:||||||||:||||||||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:||||||||||||:|||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT   4
AAW08349
ID   AAW08349 standard; Protein; 488 AA.
XX
AC   AAW08349;
XX
DT   14-MAR-1997  (first entry)
XX
DE   EpoRFc fusion protein.
XX
KW   Receptor agonist; antibody; erythropoietin receptor; EpoR;
KW   immunogen; antigen; metallothionein; promoter; IgG1; Fc;
KW   anaemia; therapy.
XX
OS   Chimeric Homo sapiens;
OS   Chimeric synthetic.
XX
FH   Key             Location/Qualifiers
FT   Domain          1..250
FT                   /label= EpoR-ECD
FT                   /note= "erythropoietin receptor extracellular
FT                    domain"
FT   Cleavage-site   251..254
FT                   /note= "Factor Xa cleavage site"
FT   Domain          255..488
FT                   /label= Fc
FT                   /note= "human IgG1 Fc sequence"
XX
PN   WO9640231-A1.
XX
PD   19-DEC-1996.
XX
PF   07-JUN-1996;   96WO-US09613.
XX
PR   07-JUN-1995;   95US-0474673.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Erickson-Miller CL,  Young PR;
XX
DR   WPI; 1997-051900/05.
DR   N-PSDB; AAT48800.
XX
PT   Recombinant immunogen corresp. to dimeric form of a receptor - used
PT   for generating antibodies able to act as receptor agonists, esp. of
PT   erythropoietin receptor for treating anaemia
XX
PS   Example 1; Page 39-41; 83pp; English.
XX
CC   A fusion protein (AAW08349) encoded by plasmid mtalsEpoRFc (AAT48800)
CC   comprises the human erythropoietin receptor (EpoR) extracellular
CC   domain fused (via a Factor Xa cleavage sequence) to the Fc portion
CC   of human IgG1.  It can be expressed e.g. in transfected Drosophila
CC   S2 cells upon induction with copper sulphate.  The cells secrete
CC   EpoRFc as a dimeric molecule due to the affinity of the Fc moiety
CC   for itself.  The dimeric receptor can be used as an immunogen to
CC   generate antibodies (monoclonal, polyclonal, chimeric, humanised)
CC   able to act as EcoR agonists for use in treatment of anaemia.
XX
SQ   Sequence   488 AA;


  Query Match             82.6%;  Score 1060;  DB 18;  Length 488;
  Best Local Similarity   93.8%;  Pred. No. 2.5e-98;
  Matches  198;  Conservative   11;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           ||||||||||||||||||||||||||||||:||||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:|||||||||||||||||||:||||||||:||||||||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:||||||||||||:|||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT   5
AAB13012
ID   AAB13012 standard; Protein; 503 AA.
XX
AC   AAB13012;
XX
DT   08-DEC-2000  (first entry)
XX
DE   Q-tagged erythropoietin (EPO) receptor protein.
XX
KW   Site specific label; detection; interaction screening; transglutaminase;
KW   erythropoietin receptor; EPO.
XX
OS   Synthetic.
XX
PN   WO200043492-A2.
XX
PD   27-JUL-2000.
XX
PF   20-JAN-2000; 2000WO-US01481.
XX
PR   22-JAN-1999;   99US-0117327.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
XX
PI   Tew DG,  Powell DJ,  Meek TD,  Chen W;
XX
DR   WPI; 2000-499222/44.
XX
PT   Screening for a candidate compound for use in bioassays comprises
PT   contacting the candidate molecule with a labelled modified protein and
PT   detecting the label to identify interaction of the two molecules -
XX
PS   Example 4; Page 26; 49pp; English.
XX
CC   This invention relates to methods for the site specific modification of
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CC   a protein, and to a method for screening for a candidate compound which
CC   interacts with first protein. The screening method comprises contacting
CC   the candidate molecule with a labelled modified first protein and
CC   detecting the label to identify interaction of the labelled modified
CC   first protein and candidate compound. The first protein is modified to
CC   contain a peptide, represented by sequence AAB13005. The method is
CC   used to label proteins at specific sites. The present sequence
CC   represents a Q-tagged erythropoietin (EPO) receptor constructed in an
CC   example of the method of the invention.
XX
SQ   Sequence   503 AA;


  Query Match             82.6%;  Score 1060;  DB 21;  Length 503;
  Best Local Similarity   93.8%;  Pred. No. 2.6e-98;
  Matches  198;  Conservative   11;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           ||||||||||||||||||||||||||||||:||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:||||||||||||||||||:||||||||:||||||||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:||||||||||||:|||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | ||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT   6
AAR06512
ID   AAR06512 standard; protein; 508 AA.
XX
AC   AAR06512;
XX
DT   04-JAN-1991  (first entry)
XX
DE   EPO receptor.
XX
KW   Erythropoietin; Diamond Blackfan anaemia; polycythemia vera.
XX
OS   Homo sapiens.
XX
PN   WO9008822-A.
XX
PD   09-AUG-1990.
XX
PF   01-FEB-1990;   90WO-US00635.
XX
PR   03-FEB-1989;   89US-0306503.
XX
PA   (GENE-) GENETICS INST INC.
PA   (WHIT-) WHITEHEAD INST.
XX
PI   D'andrea A,  Wong G;
XX
DR   WPI; 1990-260931/34.
DR   N-PSDB; AAQ05748.
XX
PT   Erythropoietin receptor and gene - used for developing reagents
PT   and systems to control and study erythropoiesis.
XX
PS   Disclosure; Fig 2; 53pp; English.
XX
CC   The sequence was deduced from DNA obtd. from a clone isolated from
CC   a commercially available human geenomic cDNA library in phage
CC   Lambda Fix (Stratagene).  The sequence encodes a type I trans-
CC   membrane protein with binding affinity for EPO.  The gene and
CC   recombinant EPO receptor produced on expression of the DNA are
CC   used to develop reagents and systems to control and study
CC   erythropoiesis.  It is believed that the EPO receptor is dys-
CC   functional in individuals with Diamond Blackfan anaemia, and may
CC   be hyperactive in polycythemia vera.
CC   See also AAR06511 (murine EPO receptor).
XX
SQ   Sequence   508 AA;


  Query Match             82.6%;  Score 1060;  DB 11;  Length 508;
  Best Local Similarity   93.8%;  Pred. No. 2.6e-98;
  Matches  198;  Conservative   11;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           ||||||||||||||||||||||||||||||:||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:||||||||||||||||||:||||||||:||||||||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:||||||||||||:|||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | ||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT   7
AAR70032
ID   AAR70032 standard; Protein; 508 AA.
XX
AC   AAR70032;
XX
DT   07-OCT-1995  (first entry)
XX
DE   Human erythropoietin receptor.
XX
KW   Erythropoietin receptor; extracellular domain.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Domain          25..250
FT                   /note= "extracellular domain"
FT   Domain          9..83
FT                   /note= "extracellular domain"
FT   Misc-difference 25..29
FT                   /note= "forward primer AAQ82991 specific site"
FT   Misc-difference 222..226
FT                   /note= "reverse primer AAQ82992 specific site"
XX
PN   WO9505469-A.
XX
PD   23-FEB-1995.
XX
PF   15-AUG-1994;   94WO-US09298.
XX
PR   16-AUG-1993;   93US-0106815.
XX
PA   (LEEJ/) LEE J Y.
XX
PI   Lee JY;
XX
DR   WPI; 1995-098767/13.
DR   N-PSDB; AAQ82990.
XX
PT   New pure human erythropoietin receptor fragment - obtd. by
PT   expression as a fusion protein having a thrombin proteolytic
PT   cleavage site.
```

```
XX
PS   Disclosure; Page 27-29; 42pp; English.
XX
CC   The full-length erythropoietin receptor (EPO-R) is given.
CC   Extracellular domains are expressed from vector plasmid pGEX-2T as
CC   fusion proteins with glutathione-S-transferase.  The domains are
CC   used for investigating the structure of the EPO-R and for
CC   identifying factors involved in regulating differentiation and
CC   proliferation mechanisms in erythroid progenitor cells.  They can
CC   also be used for identifying and quantitating EPO and EPO-R as well
CC   as in understanding haematopoietic malignancy and some
CC   cardiovascular system disorders.
XX
SQ   Sequence   508 AA;


  Query Match             82.6%;  Score 1060;  DB 16;  Length 508;
  Best Local Similarity   93.8%;  Pred. No. 2.6e-98;
  Matches  198;  Conservative   11;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||||||||||||||||||||:|||||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:|||||||||||||||||||||:||||||||:||||||||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:||||||||||||||:||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT   8
AAR69503
ID   AAR69503 standard; Protein; 508 AA.
XX
AC   AAR69503;
XX
DT   11-AUG-1995  (first entry)
XX
DE   Human erythropoietin receptor.
XX
KW   Erythropoietin receptor; anemia therapy; diagnostic.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..24
FT                   /note= "signal peptide"
FT   Protein         25..508
FT                   /note= "mature protein"
FT   Modified-site   76..79
FT                   /note= "N-glycosylation site"
FT   Domain          251..272
FT                   /note= "transmembrane region"
XX
PN   US5378808-A.
XX
PD   03-JAN-1995.
XX
PF   03-FEB-1989;   89US-0306503.
XX
PR   03-FEB-1989;   89US-0306503.
PR   25-MAR-1991;   91US-0678877.
PR   10-JUN-1993;   93US-0075069.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   D'andrea A,  Jones SS,  Wong GG;
XX
DR   WPI; 1995-051310/07.
DR   N-PSDB; AAQ81892.
XX
PT   New recombinant erythropoietin receptor polypeptide(s) - used for
PT   detection, purificn. and therapy and for prodn. of antibodies for
PT   detection and therapy
XX
PS   Claim 2; Fig 9; 24pp; English.
XX
CC   The sequence is that of a 55-kDa human erythropoietin receptor.  The
CC   receptor polypeptide may be used in purification and detection of
CC   erythropoietin, and in production of antibodies for anemia therapy.
CC   The polypeptide may also be used for treating individuals
CC   who are hypersensitive to erythropoietin or who have elevated
CC   erythropoietin levels.  They may be used in therapy of e.g. primary
CC   or secondary proliferative polycythemia.
XX
SQ   Sequence   508 AA;


  Query Match             82.6%;  Score 1060;  DB 16;  Length 508;
  Best Local Similarity   93.8%;  Pred. No. 2.6e-98;
  Matches  198;  Conservative   11;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||||||||||||||||||||:|||||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:|||||||||||||||||||||:||||||||:||||||||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:||||||||||||||:||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT   9
AAR47518
ID   AAR47518 standard; Protein; 508 AA.
XX
AC   AAR47518;
XX
DT   24-JUN-1994  (first entry)
XX
DE   Human EPO receptor.
XX
KW   Erythropoietin receptor; recombinant; murine; anaemia.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..24
FT                   /note= "signal peptide"
FT   Protein         25..508
FT                   /note= "mature EPO receptor"
FT   Region          251..272
FT                   /note= "putative transmembrane domain"
XX
PN   US5278065-A.
XX
PD   11-JAN-1994.
XX
PF   03-FEB-1989;   89US-0306503.
XX
PR   03-FEB-1989;   89US-0306503.
PR   25-MAR-1991;   91US-0678877.
```

```
XX
PA   (CHIL-) CHILDRENS MEDICAL CENT.
PA   (GEMY ) GENETICS INST INC.
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   D'andrea A,  Jones SS,  Wong GG;
XX
DR   WPI; 1994-025409/03.
DR   N-PSDB; AAQ53995.
XX
PT   Recombinant DNA encoding erythropoietin receptor - used to
PT   develop prods. for study, treatment or diagnosis of disorders in
PT   which receptor is dysfunctional
XX
PS   Disclosure; Fig 9; 24pp; English.
XX
CC   Mouse erythroleukaemia (MEL) cells were used to construct a cDNA
CC   library.  The cDNA was used to transfect COS-1 cells and these were
CC   screened for radioiodinated erythropoietin (EPO) binding to isolate
CC   cDNA encoding the EPO receptor.   This cDNA was used as a probe to
CC   screen a human genomic cDNA library to obtain DNA encoding the human
CC   EPO receptor.  The cDNA may be used to study, treat or diagnose
CC   disorders in which the EPO receptor is dysfunctional.The EPO
CC   receptor may also be used to raise antibodied or for treating
CC   hypersensitivity to EPO or who have elevated levels of EPO.  The pord.
CC   is pref. used for treating anaemias, primary proliferative polycythemia
CC   and secondary polycythemia.
CC   See also AAR47517.
XX
SQ   Sequence   508 AA;


  Query Match            82.0%;  Score 1053;  DB 15;  Length 508;
  Best Local Similarity  92.9%;  Pred. No. 1.3e-97;
  Matches  196;  Conservative   12;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||||||||||||||||||||:|| ||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweegasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:|||||||||||||||||||:||||||||:|||||:|||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihmnevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           ||||||||||:|||||||||||||||:|:|:|||||||||||||:|||||||||||||||
Db     154 rladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT  10
AAY44623
ID   AAY44623 standard; Protein; 438 AA.
XX
AC   AAY44623;
XX
DT   07-APR-2000  (first entry)
XX
DE   R154C truncated human EpoR(t439).
XX
KW   Truncated human EpoR; erythropoietin receptor; hypersensitive EpoR(t439);
KW   mutant human EpoR; EpoR signalling; cancer; infectious disease; HIV;
KW   sickle cell anaemia; cytostatic; antimicrobial; antiviral;
KW   immunostimulant; anti-anaemic.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 154
FT                   /note= "Wild type Arg substituted by Cys"
XX
PN   WO9967360-A2.
XX
PD   29-DEC-1999.
XX
PF   25-JUN-1999;   99WO-CA00606.
XX
PR   25-JUN-1998;   98CA-2241576.
PR   25-JAN-1999;   99CA-2260332.
XX
PA   (HEMO-) HEMOSOL INC.
XX
PI   Bell D,  Matthews KE,  Mueller SG;
XX
DR   WPI; 2000-136979/12.
DR   N-PSDB; AAZ49636.
XX
PT   Serum free defined medium useful for the efficient culture of stem
PT   cells used for production of hemoglobin  -
XX
PS   Example 6; Fig 10; 61pp; English.
XX
CC   The present sequence is R154C truncated human EpoR (erythropoietin
CC   receptor). Transfection of constitutively active EpoR(t439; R154C) by
CC   electroporation into a cytokine-dependent cell line supports cell
CC   population expansion in the absence of exogenous cytokines. Mutant human
CC   EpoR is used in treatment of disorders related to inadequate EpoR
CC   signalling. The transfected cells may also used in gene therapy to treat
CC   cancer, infectious diseases (e.g. HIV), sickle cell anaemia, and
CC   conditions related to abnormal expression of erythropoietin.
XX
SQ   Sequence   438 AA;


  Query Match            81.9%;  Score 1052;  DB 21;  Length 438;
  Best Local Similarity  93.4%;  Pred. No. 1.4e-97;
  Matches  197;  Conservative   11;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||||||||||||||||||||:|||||||||||:|||:||||||||||||
Db      34 kfeskaallaargpeellcfterledlvcfweeaasagvgpgnysfsyqledepwklcrl 93

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           |||||||||:|||||||||||||||||||:||||||||:|||||:|||||||||||||||
Db      94 hqaptargavrfwcslptadtssfvplelrvtaasgapryhrvihinevvlldapvglva 153

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           |||||||||:|||||||||||||||:|:|:|||||||||||||:|||||||||||||||
Db     154 cladesghvvlrwlpppetpmtshiryevdvsagngagsvqrveilegrtecvlsnlrgr 213

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||||||||||||||||||
Db     214 trytfavrarmaepsfggfwsawsepvsllt 244


RESULT  11
AAR50326
ID   AAR50326 standard; Protein; 265 AA.
XX
AC   AAR50326;
XX
DT   19-OCT-1994  (first entry)
XX
DE   Mouse soluble EPO receptor protein fragment.
XX
KW   Murine; soluble; erythropoietin; EPO; receptor protein; sEPO-R; drug;
KW   antigen; diagnostic agent; biochemical reagent.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..25
FT                   /note= "Signal peptide"
```

```
FT   Protein          26..265
FT                    /note= "Mature EPO-R fragment"
XX
PN   JP06038787-A.
XX
PD   15-FEB-1994.
XX
PF   04-MAR-1992;   92JP-0082865.
XX
PR   04-MAR-1992;   92JP-0082865.
XX
PA   (SNOW ) SNOW BRAND MILK PROD CO LTD.
XX
DR   WPI; 1994-094847/12.
DR   N-PSDB; AAQ44853.
XX
PT   Soluble erythropoietin receptor protein - and DNA coding for
PT   SEPO-R, useful as diagnostic reagent
XX
PS   Disclosure; Page 5-6; 9pp; Japanese.
XX
CC   This sequence represents a fragment of the murine soluble erythro-
CC   poietin (EPO) receptor protein (sEPO-R).  This protein is able to
CC   bind to EPO and has antigenicity as an EPO receptor.  The molecular
CC   wieght of the full length protein is pref 33 or 29 kD.  The protein
CC   is useful as a drug, as a diagnostic agent and a biochemical reagent.
XX
SQ   Sequence   265 AA;


  Query Match             68.2%;  Score 875.5;  DB 15;  Length 265;
  Best Local Similarity   77.1%;  Pred. No. 4.6e-80;
  Matches  165;  Conservative   22;  Mismatches   26;  Indels    1;  Gaps    1;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||:|| |||||||:||||||||:|||||:|:   |:|||:||| |  | | |
Db      34 kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl 92

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           ||||| ||::|||||||||||||||||::| |||:||:||:|||||||||||| ||:|
Db      93 hqaptvrgsvrfwcslptadtssfvplelqvteasgspryhriihinevvlldapaglla 152

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           | |:|  |||:|||||  |||:|||:|:|:|||| ||  ||||:|||||||||||||||
Db     153 rraeegshvvlrwlpppgapmtthiryevdvsagnraggtqrvevlegrtecvlsnlrgg 212

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLTGGG 214
           || | |||||||||||| |||||||||| ||||  |
Db     213 trytfavrarmaepsfsgfwsawsepaslltasg 246


RESULT  12
AAR06511
ID   AAR06511 standard; protein; 507 AA.
XX
AC   AAR06511;
XX
DT   04-JAN-1991  (first entry)
XX
DE   EPO receptor sequence deduced from DNA of clone 190.
XX
KW   Erythropoietin; Diamond Blackfan anaemia; polycythemia vera.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..24
FT                   /label=signal peptide
FT   Domain          25..248
FT                   /label=extracellular domain
FT                   /note=EPO binding region
FT   Domain          248..271
FT                   /label=transmembrane domain
FT   Domain          272..507
FT                   /label=intracellular domain
FT   Modified-site   75..77
FT                   /label=N-linked_glycos
FT   Modified-site   182..184
FT                   /label=N-linked_glycos
XX
PN   WO9008822-A.
XX
PD   09-AUG-1990.
XX
PF   01-FEB-1990;   90WO-US00635.
XX
PR   03-FEB-1989;   89US-0306503.
XX
PA   (GENE-) GENETICS INST INC.
PA   (WHIT-) WHITEHEAD INST.
XX
PI   D'andrea A,  Wong G;
XX
DR   WPI; 1990-260931/34.
DR   N-PSDB; AAQ05747.
XX
PT   Erythropoietin receptor and gene - used for developing reagents
PT   and systems to control and study erythropoiesis.
XX
PS   Disclosure; Fig 1; 53pp; English.
XX
CC   The sequence was deduced from DNA from a clone isolated from a
CC   cDNA library prepd. from uninduced murine erythroleukemia cells.
CC   It is a type I transmembrane protein with binding affinity for EPO.
CC   The gene and recombinant EPO receptor produced on expression of
CC   the DNA are used to develop reagents and systems to control and
CC   study erythropoiesis.  It is believed that the EPO receptor is
CC   dysfunctional in individuals with Diamond Blackfan anaemia, and
CC   may be hyperactive in polycythemia vera.
CC   See also AAR06512 (human EPO receptor).
XX
SQ   Sequence   507 AA;


  Query Match             67.7%;  Score 869.5;  DB 11;  Length 507;
  Best Local Similarity   77.7%;  Pred. No. 4.4e-79;
  Matches  164;  Conservative   22;  Mismatches   24;  Indels    1;  Gaps    1;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||:|| |||||||:||||||||:|||||:|:   |:|||:||| |  | | |
Db      34 kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl 92

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           ||||| ||::|||||||||||||||||::| |||:||:||:|||||||||||| ||:|
Db      93 hqaptvrgsvrfwcslptadtssfvplelqvteasgspryhriihinevvlldapaglla 152

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           | |:|  |||:|||||  |||:|||:|:|:|||| ||  ||||:|||||||||||||||
Db     153 rraeegshvvlrwlpppgapmtthiryevdvsagnraggtqrvevlegrtecvlsnlrgg 212

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||| |||||||||| ||||
Db     213 trytfavrarmaepsfsgfwsawsepasllt 243


RESULT  13
AAR47517
ID   AAR47517 standard; Protein; 507 AA.
XX
AC   AAR47517;
XX
DT   24-JUN-1994  (first entry)
XX
DE   MEL EPO receptor.
XX
KW   Erythropoietin receptor; recombinant; murine; anaemia.
```

```
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..24
FT                   /note= "signal"
FT   Protein         25..507
FT                   /note= "mature EPO receptor"
FT   Modified-site   75
FT                   /note= "potential N-glycosylation site"
FT   Modified-site   383
FT                   /note= "potential N-glycosylatiom site"
FT   Region          250..271
FT                   /note= "putative transmembrane region"
XX
PN   US5278065-A.
XX
PD   11-JAN-1994.
XX
PF   03-FEB-1989;   89US-0306503.
XX
PR   03-FEB-1989;   89US-0306503.
PR   25-MAR-1991;   91US-0678877.
XX
PA   (CHIL-) CHILDRENS MEDICAL CENT.
PA   (GEMY ) GENETICS INST INC.
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   D'andrea A,  Jones SS,  Wong GG;
XX
DR   WPI; 1994-025409/03.
DR   N-PSDB; AAQ53994.
XX
PT   Recombinant DNA encoding erythropoietin receptor - used to
PT   develop prods. for study, treatment or diagnosis of disorders in
PT   which receptor is dysfunctional
XX
PS   Disclosure; Fig 2; 24pp; English.
XX
CC   Mouse erythroleukaemia (MEL) cells were used to construct a cDNA
CC   library.  The cDNA was used to transfect COS-1 cells and these were
CC   screened for radioiodinated erythropoietin (EPO) binding to isolate
CC   cDNA encoding the EPO receptor.  The cDNA may be used to isolate the
CC   EPO receptor from other sources and to study, treat or diagnose
CC   disorders in which the EPO receptor is dysfunctional.The EPO
CC   receptor may also be used to raise antibodied or for treating
CC   hypersensitivity to EPO or who have elevated levels of EPO.  The pord.
CC   is pref. used for treating anaemias, primary proliferative polycythemia
CC   and secondary polycythemia.
CC   See also AAR47518.
XX
SQ   Sequence   507 AA;


  Query Match             67.7%;  Score 869.5;  DB 15;  Length 507;
  Best Local Similarity   77.7%;  Pred. No. 4.4e-79;
  Matches  164;  Conservative   22;  Mismatches   24;  Indels    1;  Gaps    1;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||:|| |||||||:||||||||:|||||:|:   |:|||:||| |  | | |
Db      34 kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl 92

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           ||||| ||::|||||||||||||||||::| |||:||:||:|||||||||||| ||:|
Db      93 hqaptvrgsvrfwcslptadtssfvplelqvteasgspryhriihinevvlldapaglla 152

Qy     121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
           | |:|  |||:|||||  |||:|||:|:|:|||| ||  ||||:|||||||||||||||
Db     153 rraeegshvvlrwlpppgapmtthiryevdvsagnraggtqrvevlegrtecvlsnlrgg 212

Qy     181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
           || | |||||||||||  |||||||||  ||||
Db     213 trytfavrarmaepsfsgfwsawsepasllt 243
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RESULT  14
AAR69502
ID   AAR69502 standard; Protein; 507 AA.
XX
AC   AAR69502;
XX
DT   10-AUG-1995  (first entry)
XX
DE   Mouse erythropoietin receptor.
XX
KW   Erythropoietin receptor; anemia therapy; signal peptide;
KW   transmembrane region; N-linked glycosylation.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..24
FT                   /note= "signal peptide"
FT   Protein         25..507
FT                   /note= "mature protein"
FT   Modified-site   75..77
FT                   /note= "N-linked glycosylation site"
FT   Domain          250..271
FT                   /note= "transmembrane region"
FT   Modified-site   383..385
FT                   /note= "N-linked glycosylation site"
XX
PN   US5378808-A.
XX
PD   03-JAN-1995.
XX
PF   03-FEB-1989;   89US-0306503.
XX
PR   03-FEB-1989;   89US-0306503.
PR   25-MAR-1991;   91US-0678877.
PR   10-JUN-1993;   93US-0075069.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   D'andrea A,  Jones SS,  Wong GG;
XX
DR   WPI; 1995-051310/07.
DR   N-PSDB; AAQ81891.
XX
PT   New recombinant erythropoietin receptor polypeptide(s) - used for
PT   detection, purificn. and therapy and for prodn. of antibodies for
PT   detection and therapy
XX
PS   Claim 1; Fig 2; 24pp; English.
XX
CC   The sequence corresponds to a mouse erythropoietin receptor,
CC   including putative signal peptide and transmembrane regions, and 2
CC   N-linked glycosylation sites.  The protein is derived from mouse
CC   erythroleukemia cells and may be used in drug design or in
CC   pharmaceutical compositions for therapy of anemia.
XX
SQ   Sequence   507 AA;


  Query Match             67.7%;  Score 869.5;  DB 16;  Length 507;
  Best Local Similarity   77.7%;  Pred. No. 4.4e-79;
  Matches  164;  Conservative   22;  Mismatches   24;  Indels    1;  Gaps    1;

Qy       1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
           |||||||||||:|| |||||||:||||||||:|||||:|:   |:|||:||| |  | | |
Db      34 kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl 92

Qy      61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
           ||||| ||::|||||||||||||||||::| |||:||:||:|||||||||||| ||:|
Db      93 hqaptvrgsvrfwcslptadtssfvplelqvteasgspryhriihinevvlldapaglla 152
```

```
Qy    121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
          | |:|  |||:|||||| |||:|||:|:|:|||| ||  ||||:|||||||||||||||
Db    153 rraeegshvvlrwlpppgapmtthiryevdvsagnraggtqrvevlegrtecvlsnlrgg 212

Qy    181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
          || | |||||||||||| |||||||||| ||||
Db    213 trytfavrarmaepsfsgfwsawsepasllt 243


RESULT  15
AAR50327
ID   AAR50327 standard; Protein; 507 AA.
XX
AC   AAR50327;
XX
DT   19-OCT-1994  (first entry)
XX
DE   Mouse soluble EPO receptor protein.
XX
KW   Murine; soluble; erythropoietin; EPO; receptor protein; sEPO-R; drug;
KW   antigen; diagnostic agent; biochemical reagent.
XX
OS   Mus musculus.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   75..77
FT                   /note= "N-linked glycosylation site"
XX
PN   JP06038787-A.
XX
PD   15-FEB-1994.
XX
PF   04-MAR-1992;   92JP-0082865.
XX
PR   04-MAR-1992;   92JP-0082865.
XX
PA   (SNOW ) SNOW BRAND MILK PROD CO LTD.
XX
DR   WPI; 1994-094847/12.
DR   N-PSDB; AAQ44854.
XX
PT   Soluble erythropoietin receptor protein - and DNA coding for
PT   SEPO-R, useful as diagnostic reagent
XX
PS   Disclosure; Fig 1; 9pp; Japanese.
XX
CC   This sequence represents the murine soluble erythropoietin (EPO)
CC   receptor protein (sEPO-R).  This protein is able to bind to EPO and
CC   has antigenicity as an EPO receptor.  The molecular wieght of the
CC   full length protein is pref 33 or 29 kD.  The protein is useful as a
CC   drug, as a diagnostic agent and a biochemical reagent.
XX
SQ   Sequence   507 AA;


  Query Match             67.2%;  Score 862.5;  DB 15;  Length 507;
  Best Local Similarity   77.3%;  Pred. No. 2.3e-78;
  Matches  163;  Conservative   22;  Mismatches   25;  Indels    1;  Gaps    1;

Qy      1 KFESKAALLAARGPEELLCFTERLEDLVCFFEEAASAGVGPGNFSFSFQLEDEPWKLCRL 60
          ||||||||||:|| |||||||:||||||||:|||||:|:   |:|||:||| |  | | |
Db     34 kfeskaallasrgseellcftqrledlvcfweeaassgm-dfnysfsyqlegesrkscsl 92

Qy     61 HQAPTARGAIRFWCSLPTADTSSFVPLELRLTAASGAPRFHRVIHINEVVLLDAPVGLVA 120
          ||||| ||::|||||||||||||||||::| |||:||:||:|||||||||||| ||:|
Db     93 hqaptvrgsvrfwcslptadtssfvplelqvteasgspryhriihinevvlldapaglla 152

Qy    121 RLADESGHVVIRWLPPPETPMTSHIRFELDISAGNGAGSVQRVELLEGRTECVLSNLRGR 180
          | |:|  |||:|||||| |||:|||:|:|:|||| ||  ||||:||| ||||||||||
Db    153 rraeegshvvlrwlpppgapmtthiryevdvsagnraggtqrvevlegptecvlsnlrgg 212

Qy    181 TRITIAVRARMAEPSFGGFWSAWSEPVSLLT 211
          || | |||||||||||| |||||||||| ||||
Db    213 trytfavrarmaepsfsgfwsawsepasllt 243


Search completed: August 28, 2002, 17:31:07
Job time: 1454 sec
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